

AMENDED CLAIMS

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original claims 1,2,4-9, 18, 20-22 amended ; claim 23 new]

1. A sensor configured to determine a parameter of a flow of respiratory gas comprising:
a transducer,
a sensor housing configured for positioning adjacent said flow of gas configured to house
5 said transducer and provide a substantial pathogen barrier to said flow of gas; and
a conductive path between said transducer and said flow of gas.
2. A sensor according to claim 1 wherein said sensor housing has a locator to ensure said
transducer is correctly positioned and/or aligned.
3. A sensor according to anyone of claims 1 or 2 wherein said sensor housing is integrally
10 moulded in a gases conduit for conveying said flow of gas.
4. A sensor according to any one of claims 1 to 3 wherein said conductive path has a
thermally conductive probe.
5. A sensor according to any of claims 1 to 4 wherein said conductive path crosses said flow
of gas.
- 15 6. A sensor according to any one of claims 1 to 5 wherein said conductive path is a band that
said flow of gas flows within.
7. A sensor according to claim 3 wherein said sensor housing is combined with an
engagement for an electrical connection.
8. A sensor according to claim 7 wherein said engagement for an electrical connection
20 comprises an electrical contact adapted to energise a heater wire for heating said conduit or the
interior thereof.
9. A sensor according to any one of claims 1 to 8 wherein said sensor housing means has
longitudinal axis substantially perpendicular to said flow of gas.
10. A system for conveying a flow of respiratory gas comprising:
25 a conduit adapted to convey said flow of gases, and
a thermally conductive member extending from the interior of said conduit adjacent said
flow of gas to the exterior of said conduit.
11. A system for conveying a flow of respiratory gas according to claim 10 wherein said
thermally conductive member further comprises an engagement for a temperature sensor.
- 30 12. A system for conveying a flow of respiratory gas according to claims 10 or 11 wherein
said engagement for a temperature sensor is adapted to ensure intimate contact of said exterior

portion of said thermally conductive member and a temperature sensor.

13. A system for conveying a flow of respiratory gas according to any one of claims 10 to 12 wherein said thermally conductive member comprises a thermally conductive housing.

14. A system for conveying a flow of respiratory gas according to any one of claims 10 to 12 wherein said thermally conductive member comprises a thermally conductive probe.

15. A system for conveying a flow of respiratory gases according to any one of claims 10 to 14 wherein said thermally conductive member comprises a conductive path that crosses the entire interior of said conduit.

16. A system for conveying a flow of respiratory gases according to any one of claims 13 to 15 wherein said thermal conductive member comprises a conductive band within the circumference of said conduit.

17. A system for conveying a flow of respiratory gases according to any one of claims 11 to 16 wherein said engagement for a temperature sensor is combined with an engagement for an electrical connection.

18. A system for conveying a flow of respiratory gases according to any one of claims 11 to 17 wherein said temperature sensor is housed within a sensor housing.

19. A system for conveying a flow of respiratory gases according to any one of claims 13 to 18 wherein said sensor housing is combined with an engagement for an electrical connection.

20. A system for conveying a flow of respiratory gases according to any one of claims 18 or 19 wherein said sensor housing means has longitudinal axis substantially perpendicular to said flow of gases.

21. A sensor configured to engage a system as claimed in any one of claims 11 to 20.

22. A sensor as herein described with reference to the accompanying figures.

23. A system for conveying a flow of respiratory gases as herein described with reference to the accompanying figures.